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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,822	11/20/2003	James Chien-Chiung Chen	TUC920030129US1	8660

36491 7590 11/07/2006

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EXAMINER

BROWN, MICHAEL J

ART UNIT PAPER NUMBER

2116

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,822

Applicant(s)

CHEN ET AL.

Examiner

Michael J. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al.(US Patent 6,732,267).

As to claim 1, Wu discloses a concurrent code load apparatus for fastload code image update on a communications adapter(target system 102, see Fig. 1), the apparatus comprising an image load module(system administrator; see column 3, line 62) configured to load a copy of a new code image(updated BIOS image; see column 3, line 63) in a memory(storage device; see column 3, line 67) on the communications adapter, the memory concurrently storing a copy of an old code image(old system BIOS; see column 4, line 30) used by the communications adapter. Wu also discloses the apparatus comprising a memory initialization module(operating system module; see column 3, line 65) configured to invoke the new code image to perform a memory initialization operation(see column 3, lines 64-67), and an image overlay module configured to overlay the old code image with the new code image(see Fig 2, Item 216).

As to claim 2, Wu discloses the apparatus further comprising a query module configured to identify a characteristic of the old code image and to determine a

difference between the old code image and the new code image(see column 4, lines 27-32).

As to claim 3, Wu discloses the apparatus further comprising an image bridge module configured to reconcile an incompatibility between the old code image and the new code image(see column 4, lines 34-45).

As to claim 4, Wu discloses the apparatus further comprising a fastload key module configured to create and store a fastload key to indicate a fastload code image update on the communications adapter(see column 4, lines 52-55).

As to claim 5, Wu discloses the apparatus further comprising a fastload adapter initialization module configured to initialize the communications adapter using a fastload initialization sequence in response to a fastload code image update(see column 4, lines 52-55).

As to claim 6, Wu discloses the apparatus wherein the fastload adapter initialization module is further configured to access a fastload key prior to using the fastload initialization sequence(see column 4, lines 52-55).

As to claim 7, Wu discloses the apparatus further comprising a standard adapter initialization module configured to initialize the communications adapter using a standard initialization sequence in response to a failure to access a fastload key(see column 4, lines 52-55).

As to claim 8, Wu discloses the apparatus further comprising a fastload adapter initialization module configured to execute a fastload initialization operation during the standard initialization sequence(see column 4, lines 52-55).

As to claim 9, Wu discloses the apparatus wherein the old code image comprises a code image update module configured to control a code image update(see column 4, lines 30-32).

As to claim 10, Wu discloses the apparatus wherein the code image update module comprises a load module configured to load the new code image in the memory(see column 4, lines 30-32).

As to claim 11, Wu discloses the apparatus wherein the code image update module comprises a branch module configured to branch from the old code image to the new code image(see column 4, lines 30-32).

As to claim 12, Wu discloses the apparatus wherein the new code image comprises a bootstrap module configured to define a bootstrap operation, the bootstrap operation configured to facilitate a code image update(see column 4, lines 27-32).

As to claim 13, Wu discloses the apparatus wherein the bootstrap module comprises a conversion module, the image bridge module configured to reconcile an incompatibility between the old code image and the new code image using the conversion module(see column 4, lines 34-45).

As to claim 14, Wu discloses the apparatus wherein the bootstrap module comprises a copy module, the image overlay module configured to overlay the old code image with the new code image using the copy module(see column 4, lines 30-32).

As to claim 15, Wu discloses a storage system for facilitating fastload code image update on a source communications adapter(target system 102, see Fig. 1), the storage system comprising a source input device(system administrator; see column 3,

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line 62) configured to receive a source electronic storage media device(storage device; see column 3, line 67), the source electronic storage media device configured to store a new code image(updated BIOS image; see column 3, line 63). Wu also discloses the system comprising a storage system processor(operating system module; see column 3, line 65) configured to initiate the fastload code image update and notify the source communications adapter of the fastload code image update(see column 3, lines 64-67), and the source communications adapter configured to copy the new code image to a local memory device and to implement the fastload code image update(see Fig 2, Item 216).

As to claim 16, Wu discloses a method for fastload code image update on a communications adapter(target system 102, see Fig. 1), the method comprising loading a copy of a new code image(updated BIOS image; see column 3, line 63) in a memory(storage device; see column 3, line 67) on the communications adapter, the memory concurrently storing a copy of an old code image(old system BIOS; see column 4, line 30) used by the communications adapter. Wu also discloses the method comprising invoking the new code image to perform a memory initialization operation(see column 3, lines 64-67), and overlaying the old code image with the new code image(see Fig 2, Item 216).

As to claim 17, Wu discloses the method further comprising identifying a characteristic of the old code image and determining a difference between the old code image and the new code image(see column 4, lines 27-32).

As to claim 18, Wu discloses the method further comprising reconciling an incompatibility between the old code image and the new code image(see column 4, lines 34-45).

As to claim 19, Wu discloses the method further comprising creating and storing a fastload key to indicate a fastload code image update on the communications adapter(see column 4, lines 52-55).

As to claim 20 Wu discloses the method further comprising initializing the communications adapter using a fastload initialization sequence in response to a fastload code image update(see column 4, lines 52-55).

As to claim 21, Wu discloses the method further comprising determining if access a fastload key prior to using the fastload initialization sequence(see column 4, lines 52-55).

As to claim 22, Wu discloses the method further comprising initializing the communications adapter using a standard initialization sequence in response to a failure to access a fastload key(see column 4, lines 52-55).

As to claim 23, Wu discloses a method for fastload code image update on a communications adapter(target system 102, see Fig. 1), the method comprising loading a copy of a new code image(updated BIOS image; see column 3, line 63) in a memory(storage device; see column 3, line 67) on the communications adapter, the memory concurrently storing a copy of an old code image(old system BIOS; see column 4, line 30) used by the communications adapter. Wu also discloses the method comprising invoking the new code image to perform a memory initialization

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operation(see column 3, lines 64-67), identifying a characteristic of the old code image(see column 4, lines 27-32), and identifying an incompatibility between the old code image and the new code image(see column 4, lines 27-32). Wu further discloses the method reconciling the incompatibility between the old code image and the new code image(see column 4, lines 34-45), overlaying the old code image with the new code image(see Fig 2, Item 216), creating and storing a fastload key to indicate a fastload code image update on the communications adapter, and initializing the communications adapter using a fastload initialization sequence in response to a fastload code image update(see column 4, lines 52-55).

As to claim 24, Wu discloses a computer readable storage medium comprising computer readable code configured to carry out a method for fastload code image update on a communications adapter(target system 102, see Fig. 1), the method comprising loading a copy of a new code image(updated BIOS image; see column 3, line 63) in a memory(storage device; see column 3, line 67) on the communications adapter, the memory concurrently storing a copy of an old code image(old system BIOS; see column 4, line 30) used by the communications adapter. Wu also discloses the computer readable storage medium comprising invoking the new code image to perform a memory initialization operation(see column 3, lines 64-67), and overlaying the old code image with the new code image(see Fig 2, Item 216).

As to claim 25, Wu discloses the computer readable storage medium the method further comprises identifying a characteristic of the old code image and determining a

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difference between the old code image and the new code image(see column 4, lines 27-32).

As to claim 26, Wu discloses the computer readable storage medium wherein the method further comprises reconciling an incompatibility between the old code image and the new code image(see column 4, lines 34-45).

As to claim 27, Wu discloses the computer readable storage medium wherein the method further comprises creating and storing a fastload key to indicate a fastload code image update on the communications adapter(see column 4, lines 52-55).

As to claim 28, Wu discloses the computer readable storage medium wherein the method further comprises initializing the communications adapter using a fastload initialization sequence in response to a fastload code image update(see column 4, lines 52-55).

As to claim 29, Wu discloses the computer readable storage medium wherein the method further comprises determining if access a fastload key prior to using the fastload initialization sequence(see column 4, lines 52-55).

As to claim 30, Wu discloses the computer readable storage medium wherein the method further comprises initializing the communications adapter using a standard initialization sequence in response to a failure to access a fastload key(see column 4, lines 52-55).

As to claim 31, Wu discloses the computer readable storage medium wherein the old code image comprises a code image update module configured to control a code image update(see column 4, lines 30-32).

As to claim 32, Wu discloses the computer readable storage medium wherein the code image update module comprises a load module configured to load the new code image in the memory(see column 4, lines 30-32).

As to claim 33, Wu discloses the computer readable storage medium wherein the code image update module comprises a branch module configured to branch from the old code image to the new code image(see column 4, lines 30-32).

As to claim 34, Wu discloses the computer readable storage medium wherein the new code image comprises a bootstrap module configured to define a bootstrap operation, the bootstrap operation configured to facilitate a code image update(see column 4, lines 27-32).

As to claim 35, Wu discloses the computer readable storage medium wherein the bootstrap module comprises a conversion module, the image bridge module configured to reconcile an incompatibility between the old code image and the new code image using the conversion module(see column 4, lines 34-45).

As to claim 36, Wu discloses the computer readable storage medium wherein the bootstrap module comprises a copy module, the image overlay module configured to overlay the old code image with the new code image using the copy module(see column 4, lines 30-32).

As to claim 37, Wu discloses an apparatus for fastload code image update on a communications adapter(target system 102, see Fig. 1), the apparatus comprising means for loading(system administrator; see column 3, line 62) a copy of a new code image(updated BIOS image; see column 3, line 63) in a memory(storage device; see

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column 3, line 67) on the communications adapter, the memory concurrently storing a copy of an old code image(old system BIOS; see column 4, line 30) used by the communications adapter. Wu also discloses the apparatus comprising means for invoking(operating system module; see column 3, line 65) the new code image to perform a memory initialization operation(see column 3, lines 64-67), and means for overlaying the old code image with the new code image(see Fig 2, Item 216).

Response to Arguments

2. Applicant's arguments filed 8/18/2006 have been fully considered but they are not persuasive. Applicant argues that Wu does not teach or disclose "an image load module" configured to load a new code image in a memory on a "communication adapter." Examiner disagrees as Wu discloses a system administrator(see column 3, line 62) configured to load an updated BIOS image(see column 3, line 63) in a storage device(130) on a target system(102).

Applicant also argues that Wu does not teach or disclose "memory initialization module" configured to "invoke the new code image to perform a memory initialization operation." Examiner disagrees as Wu discloses an operating system module/system management agent(see column 3, lines 65-66) configured to invoke the updated BIOS image to perform a memory initialization operation(see column 3, line 64-column 4, line 3).

Applicant further argues that Wu does not teach or disclose a "query module" configured to "determine a difference between the old code image and the new code

image.” Examiner disagrees as Wu discloses examining the updated BIOS image to determine whether it is valid by executing a “checksum” procedure(see column 4, lines 28-29). At this point the difference between the old code image and the new code image is evident.

Applicant finally argues that Wu fails to teach or disclose a image bridge module configured to “reconcile an incompatibility between the old code image and the new code image.” Examiner disagrees as Wu discloses replacing the old system BIOS image with the updated system BIOS image(see column 4, lines 30-31) thus reconciling any incompatibilities between the old code image and the new code image.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

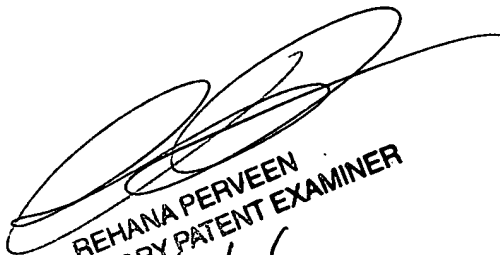
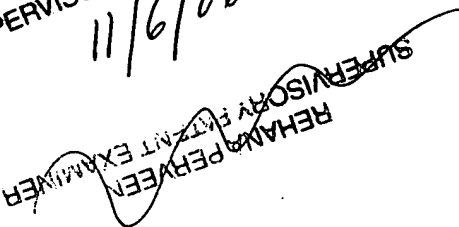
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brown whose telephone number is (571)272-5932. The examiner can normally be reached on Monday-Thursday from 7:00am to 5:30pm(EST).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIRS) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications are available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Michael J. Brown
Art Unit 2116


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SUPERVISORY PATENT EXAMINER
11/6/06

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